# CHAPTER 8
## Financial Planning and Budgeting

**Planning and budgeting play critical roles in the finance function of all health services organizations. Planning encompasses the overall process of preparing for the future, while budgeting provides the tools to tie together the planning and control functions. This chapter introduces the basics of planning and budgeting, including variance analysis.**

# The Planning Process

- The strategic plan is the foundation of the planning process. It contains a rough road map for the future and the business's
  - Values statement
  - Mission statement
  - Vision statement
- The operating, or five-year, plan lays out the organization's:
  - Goals
  - Objectives
- In addition, the operating plan provides the guidance needed to meet the goals and objectives.

# Operating Plan Format

Chapter 1: Values, mission, vision, and rough road map

Chapter 2: Organizational goals and objectives

⋮

Chapter 7: Functional area plans

A. Marketing

B. Operations

C. Finance

D. Administration and human resources

E. Facilities

Note that the plan is most detailed for the first year.

# Financial Plan Format

C. Finance

1. Fin. condition, capital investments, and financing
    a. Financial condition analysis
    b. Capital budget
    c. Forecasted financial statements
    d. External financing requirements
2. Working capital management
    a. Overall policy
    b. Cash budget
    c. Cash and marketable securities management
    d. Inventory management
    e. Revenue cycle management
    f. Short-term financing

# Financial Plan Format (Cont.)

3. Budgeting and control
    a. Statistics budget
    b. Revenue budget
    c. Expense budget
    d. Operating budget
    e. Control procedures

# Budgeting Basics

- **Budgets** are detailed plans, expressed in ***dollar terms***, that specify how resources will be used over some period of time.
- Budgets may be developed and applied to any ***level*** within an organization:
  - Aggregate
  - By department
  - By service line
  - By contract
  - By the nature of the expenditure

# Budgeting Basics (Cont.)

- To be effective, budgets must not be thought of as financial staff tools, but rather as ***managerial tools***.
- Budgets are used for:
  - Planning
  - Communication
  - Control

? What is meant by “communication”?

? How are budgets used for control?

# Statistics Budget

- At large organizations, the **statistics budget** is the foundation budget, in that it develops the input data needed for the other budgets.
- It contains ***basic*** forecasts for:
  - Volume of services provided
  - Resources (labor and capital) needed to provide those services
- Smaller organizations may not have one.

# Revenue Budget

- The revenue budget combines volume data from the statistics budget with reimbursement expectations to forecast revenues.
- The end result is a revenue forecast:
  - In the aggregate
  - By department
  - By service
  - By diagnosis (or other clinical basis)
  - By payer

# Expense Budget

- The expense budget combines volume data from the statistics budget with detailed resource utilization data to forecast expenses.
- To be most useful, expenses must be broken down into *fixed* and *variable* components.
- Like revenues, expenses must be forecasted at multiple levels.

# Operating Budget

- For larger organizations, the operating budget, which focuses on *projected profitability*, combines information from the revenue and expense budgets.
- Smaller organizations may use a single operating budget in place of multiple budget types.

# Budget Timing

- All organizations use annual budgets to set standards for the coming year.
- Most also use quarterly (or more frequent) budgets to ensure timely feedback and control.
- Not all budget types have to follow the same timing pattern.
- Out-year budgets are more for planning than for control purposes.

# Conventional vs. Zero-Based Budgets

- Traditionally, health providers have used the conventional approach to budgeting.
  - The old budget is the starting point.
  - Typically, only minor changes are made.
  - Changes often are applied equally.
- In zero-based budgeting, each new budget is started from scratch.

# Top-Down vs. Bottom-Up Budgets

- **Bottom-up** budgets:
  - Begin at subunit (departmental) level.
  - Are reviewed and compiled by the finance department.
  - Are approved by senior management.
- **Top-down** budgets:
  - Begin at the finance department with senior management guidance.
  - Are sent to the departments for review.

? What are the advantages and disadvantages of each?

# Simple Operating Budget Example

- Consider the *2015* operating budget of Carroll Clinic shown on the following four slides. This budget was created at the end of *2014*.
- The budget is divided into four parts:
  - Volume assumptions
  - Revenue assumptions
  - Cost assumptions
  - Pro forma P&L statement

# 2015 Operating Budget (Part I)

| | | | |
|---|---|---|---|
| *I.* | *Volume Assumptions:* | | |
| A. | FFS | 36,000 | visits |
| B. | Capitated lives | 30,000 | members |
| | Number of member-months | 360,000 | |
| | Expected utilization per member-month | 0.15 | |
| | Number of visits | 54,000 | visits |
| C. | Total expected visits | 90,000 | visits |

# 2015 Operating Budget (Part II)

*II. Revenue Assumptions:*

| | | | |
|---|---|---|---|
| A. | FFS | $ 25 | per visit |
| | | × 36,000 | expected visits |
| | | $ 900,000 | |
| B. | Capitated lives | $ 3 | PMPM |
| | | × 360,000 | actual member-months |
| | | $ 1,080,000 | |
| C. | Total expected revenues | $ 1,980,000 | |

# 2015 Operating Budget (Part III)

*III. Cost Assumptions:*

| | | |
|---|---|---|
| A. Variable Costs: | | |
| Labor | $ 1,200,000 | (48,000 hours at $25/hour) |
| Supplies | 150,000 | (100,000 units at $1.50/unit) |
| Total variable costs | $ 1,350,000 | |
| Variable cost per visit | $ 15 | ($1,350,000 ÷ 90,000) |
| B. Fixed Costs: | | |
| Overhead, plant, and equipment | $ 500,000 | |
| C. Total expected costs | $ 1,850,000 | |

# 2015 Operating Budget (Part IV)

*IV. Pro Forma Profit and Loss (P&L) Statement:*

| | |
|---|---|
| Revenues: | |
| FFS | $ 900,000 |
| Capitated | 1,080,000 |
| Total | $ 1,980,000 |
| Costs: | |
| Variable: | |
| FFS | $ 540,000 |
| Capitated | 810,000 |
| Total | $ 1,350,000 |
| Contribution margin | $ 630,000 |
| Fixed costs | 500,000 |
| Projected profit | $ 130,000 |

# Variance Analysis

- A **variance** is the difference between the ***actual results*** and the ***budgeted*** (**standard**) ***value.***
- **Variance analysis** is a technique applied to budget data to:
  - Identify problem areas
  - Enhance control

# Static, Actual, and Flexible Data

- In variance analysis, three types of data are used:
  - The **static budget** is the original budget, *unadjusted* for realized volume.
  - The **realized**, or **actual**, **data** reflect *after-the-fact results*.
  - A **flexible budget** is one that has been *adjusted* to reflect realized volume, but using *all other static budget (initial) assumptions*.

# Variance Analysis Example

- To illustrate variance analysis, we will use Carroll Clinic's *forecasted 2015* budget presented in slides 16–19 as the static (original) budget.
- Assume it is now *January 2016*, and the operating results for *2015* have been compiled. These results, which constitute the actual data, are shown on the next four slides.

# 2015 Results (Part I)

| | | | |
|---|---|---|---|
| *I.* | *Volume:* | | |
| A. | FFS | 40,000 | visits |
| B. | Capitated lives | 30,000 | members |
| | Number of member-months | 360,000 | |
| | Actual utilization per member-month | 0.20 | |
| | Number of visits | 72,000 | visits |
| C. | Total actual visits | 112,000 | visits |

# 2015 Results (Part II)

| | | | |
|---|---|---|---|
| *II.* | *Revenues:* | | |
| A. | FFS | $ 24 | per visit |
| | | × 40,000 | actual visits |
| | | $ 960,000 | |
| B. | Capitated lives | $ 3 | PMPM |
| | | × 360,000 | actual member-months |
| | | $ 1,080,000 | |
| C. | Total actual revenues | $ 2,040,000 | |

# 2015 Results (Part III)

| | | | |
|---|---|---|---|
| III. | *Costs:* | | |
| A. | Variable Costs: | | |
| | Labor | $ 1,557,400 | (59,900 hours at $26/hour) |
| | Supplies | 234,600 | (124,800 units at $1.88/unit) |
| | Total variable costs | $ 1,792,000 | |
| | Variable cost per visit | $ 16 | ($1,792,000 ÷ 112,000) |
| B. | Fixed Costs: | | |
| | Overhead, plant, and equipment | $ 500,000 | |
| C. | Total actual costs | $ 2,292,000 | |

# 2015 Results (Part IV)

*IV. Profit and Loss Statement:*

| | |
|---|---|
| Revenues: | |
| FFS | $ 960,000 |
| Capitated | 1,080,000 |
| Total | $ 2,040,000 |
| Costs: | |
| Variable: | |
| FFS | $ 640,000 |
| Capitated | 1,152,000 |
| Total | $ 1,792,000 |
| Contribution margin | $ 248,000 |
| Fixed costs | 500,000 |
| Actual profit | ($ 252,000) |

# Variance Analysis Example (Cont.)

- Summaries of Carroll Clinic's operating budgets and actual results for 2015 are presented on the next slide.
- These data will be use to illustrate variance analysis.
- Note that in most real-world analyses, *multiple flexible budgets* would be needed (i.e., if the number of covered lives changed).
- Also, many more types of variances than are shown here would be calculated.

| | *Static Budget* | *Flexible Budget* | *Actual Results* |
|---|---|---|---|
| Assumptions: | | | |
| FFS visits | 36,000 | 40,000 | 40,000 |
| Capitated visits | 54,000 | 72,000 | 72,000 |
| Total | 90,000 | 112,000 | 112,000 |
| Revenues: | | | |
| FFS | $ 900,000 | $1,000,000 | $ 960,000 |
| Capitated | 1,080,000 | 1,080,000 | 1,080,000 |
| Total | $1,980,000 | $2,080,000 | $2,040,000 |
| Costs: | | | |
| Variable: | | | |
| FFS | $ 540,000 | $ 600,000 | $ 640,000 |
| Capitated | 810,000 | 1,080,000 | 1,152,000 |
| Total | $1,350,000 | $1,680,000 | $1,792,000 |
| Contribution margin | $ 630,000 | $ 400,000 | $ 248,000 |
| Fixed costs | 500,000 | 500,000 | 500,000 |
| Profit | $ 130,000 | ($ 100,000) | ($ 252,000) |

Flexible budget example (variable costs): Initial (static) variable cost rate assumption = $15 per visit. Thus, the flexible budget amount for Total FFS variable costs = $15 × 40,000 = $600,000 and for Total capitated variable costs = $15 × 72,000 = $1,080,000.

# Variance Analysis Example (Cont.)

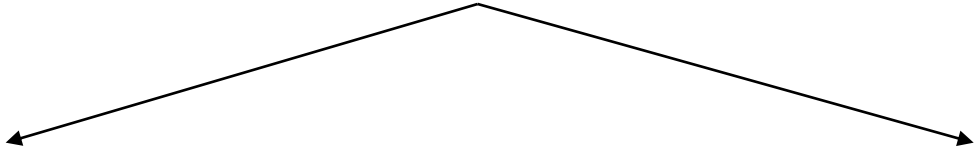
**Note the following points about the *flexible budget* on the previous slide:**

- **It is based on the *actual volume* of 40,000 FFS visits and 72,000 capitated visits.**
- **FFS revenues reflect static reimbursement ($25 per visit).**
- **If the number of enrollees had changed, a second flexible budget would be required.**
- **Costs are based on realized volume applied to *initial assumptions* regarding labor productivity and wage rates and supplies usage and costs.**

# Profit Variance and Breakdown

**Profit Variance**

**−$382,000**



| Revenue Variance | Cost Variance |
|---|---|
| $60,000 | −$442,000 |

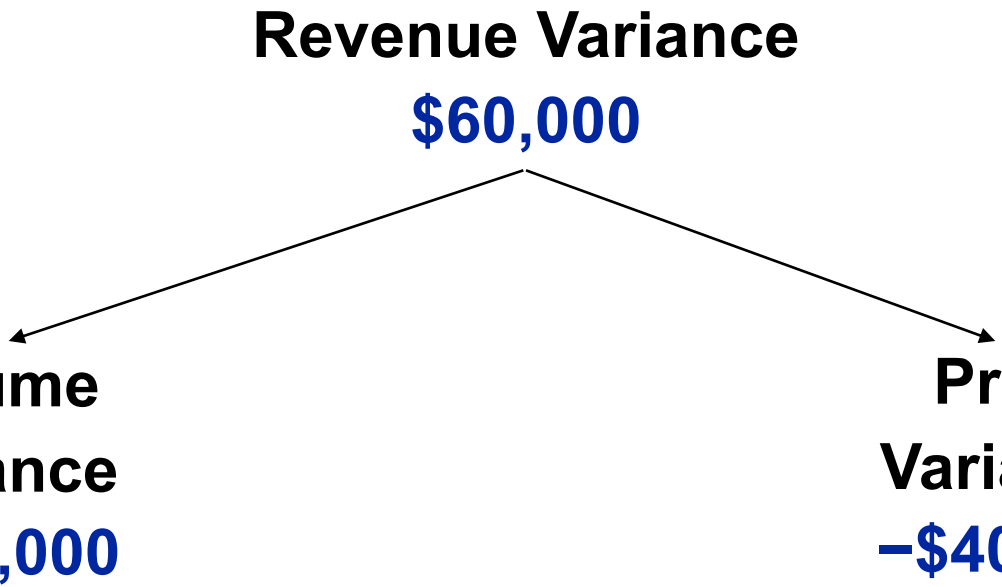
**Profit variance = Actual profit − Static profit.**
**Revenue variance = Actual revenues − Static revenues.**
**Cost variance = Static costs − Actual costs.**

**Note that variances are defined such that a negative (−) variance is "bad."**

# Profit Variance and Breakdown (Cont.)

- In 2015, the clinic's profit fell $382,000 short of *standard*, which is much worse than indicated by the P&L statement loss of $252,000.
- The profit shortfall was due entirely to a cost overrun (from standard) that amounted to −$442,000.
- A small portion of the cost overrun was offset by revenues that were $60,000 higher than expected.

# Revenue Variance Breakdown




Revenue variance = Actual revenues – Static revenues.

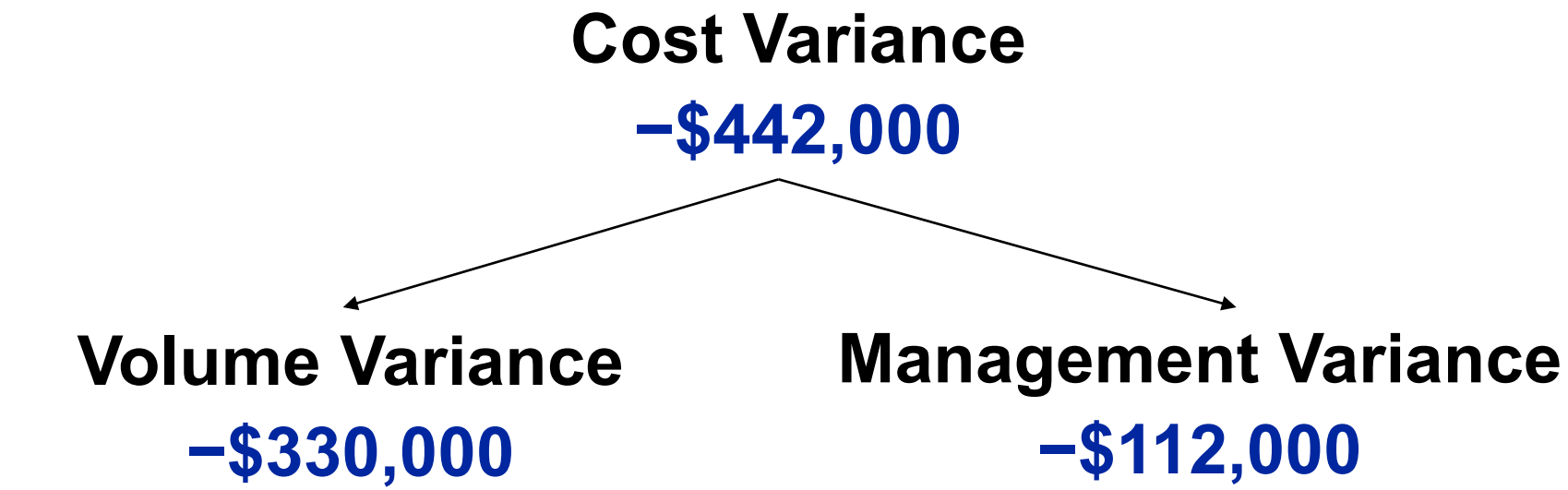
Volume variance = Flexible revenues – Static revenues.

Price variance = Actual revenues – Flexible revenues.

# Revenue Variance Breakdown (Cont.)

- On the revenue side, the $100,000 positive volume variance is due to increased utilization by FFS patients.
- However, the higher volume by FFS patients was partially offset (−$40,000) by lower-than-expected reimbursement.
- Note that to simplify the illustration, enrollment was held constant. If there had been an enrollment variance, a second flexible budget would be necessary, which would allow managers to decompose the volume variance into *enrollment* and *utilization* components.

# Cost Variance Breakdown




Cost variance = Static costs – Actual costs.

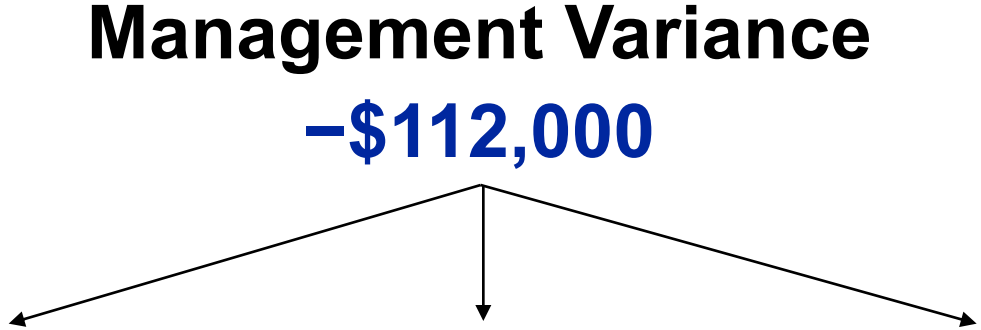
Volume variance = Static costs – Flexible costs.

Management variance = Flexible costs – Actual costs.

# Cost Variance Breakdown (Cont.)

- On the cost side, $330,000 of the total cost overrun was due to higher volume (utilization) of services by both capitated and FFS patients. Presumably, this overrun was not due to managerial (at the department level) inefficiencies.
- But $112,000 of the cost overrun was due to factors that department managers have some control over.

# Management Variance Breakdown




Management variance = Flexible costs − Actual costs.
Labor variance = Flexible LC − Actual LC.
Fixed cost variance = Flexible FC − Actual FC.
Supplies variance = Flexible SC − Actual SC.

# Management Variance Breakdown (Cont.)

- Focusing on the $112,000 cost overrun caused by factors controllable by management, $64,075 was due to higher-than-expected labor costs (after adjusting for realized volume).
- The other $47,925 was due to higher-than-expected supplies costs (after adjusting for realized volume).
- Note that this breakdown requires calculations beyond the data that are shown on the three budgets.

# Variance Analysis Example Recap

- Again, please note that variance analysis in practice typically is much more detailed than presented in this illustration.
- Also, variance analysis is applied to operating data such as census, labor hours, number of outpatient visits, and so on, often on a weekly (or even daily) basis.
- Now, however, you have the picture of what it's all about.

# That’s All for Chapter 8!